Claims

1. A scalable agent service scheduling method that supports plural computer software agents to perform tasks for plural client computation devices, the method comprising:

obtaining an isochronal table of plural activation times over a recurring time period at which periodic tasks can be activated, the isochronal table including a predefined time interval between each of the successive activation times;

characterizing each periodic task as including an initial task and one or more successive tasks to be activated periodically, the initial task having an initial event time;

applying the initial event time of the initial task of each periodic task to a corresponding activation time in the isochronal table;

determining a skipping interval representing a number of activation times in the isochronal table corresponding to the period at which each of the one or more successive tasks of a periodic task are to be activated periodically;

storing at activation times determined by the skipping interval the one or more successive tasks of each periodic task to be activated periodically; and

passing as one or more batches the tasks for each activation time for processing by one or more computer software event agents when the activation time occurs.

2. The method of claim 1 further comprising queuing independently from the isochronal table the tasks that are passed as a batch for each activation time for processing.

3. The method of claim 1 further comprising providing selected non-periodic spontaneous tasks to plural client computation devices at respective ones of the activation times.

4. The method of claim 3 in which the selected non-periodic spontaneous tasks correspond to spontaneous events that are suitable for receiving delayed processing according to a predefined rule and are distinguished from

spontaneous tasks that require immediate processing according to the predefined rule.

5. The method of claim 3 further comprising queuing independently from the isochronal table the selected non-periodic spontaneous tasks that are performed for the plural client computation devices at the respective ones of the activation times.

6. The method of claim 1 further comprising providing pre-scheduled non-periodic appointment tasks to plural client computation devices at respective ones of the activation times.

7. The method of claim6 further comprising queuing independently from the isochronal table the pre-scheduled non-periodic appointment tasks that are performed for the plural client computation devices at the respective ones of the activation times.

8. The method of claim 1 in which the recurring time period of the isochronal table is one hour.

9. The method of claim 1 in which the recurring time period of the isochronal table is 24 hours.

10. In a computer readable medium, scalable agent task scheduling software that supports plural computer software agents for performing tasks for plural client computation devices, comprising:

software for obtaining an isochronal table of plural activation times over a recurring time period at which periodic tasks can be activated, the isochronal table including a predefined time interval between each of the successive activation times;

software for characterizing each periodic task as including an initial task and one or more successive tasks to be activated periodically, the initial task having an initial event time;

software for applying the initial event time of the initial task of each periodic task to a corresponding activation time in the isochronal table;

software for determining a skipping interval representing a number of activation times in the isochronal table corresponding to the period at which each

of the one or more successive tasks of a periodic task are to be activated periodically;

software for storing at activation times determined by the skipping interval the one or more successive tasks of each periodic task to be activated periodically; and

software for passing as one or more batches tasks for each activation time for processing by one or more computer software event agents when the activation time occurs.

11. The medium of claim 10 further comprising software for queuing independently from the isochronal table the tasks that are passed as a batch for each activation time for processing.

12. The medium of claim 10 further comprising software for performing selected non-periodic spontaneous tasks for plural client computation devices at respective ones of the activation times.

13. The medium of claim 10 further comprising software for performing pre-scheduled non-periodic appointment tasks for plural client computation devices at respective ones of the activation times.

14. The medium of claim 10 in which the recurring time period of the isochronal table is one hour.

15. The medium of claim 10 in which the recurring time period of the isochronal table is 24 hours.

16. A scalable agent service scheduling system that supports plural computer software service agents for providing services to plural client computation devices, the comprising:

an isochronal scheduler of future event services, the isochronal scheduler including an isochronal table of plural activation times at which service events can be activated, the isochronal table including a predefined time interval between each of the successive activation times, the isochronal scheduler passing as a batch all service events for each activation time to a service event queue; and

a dispatcher of current service events for retrieving them from the service event queue and acquiring and launching service agents to service the service events.

17. The system of claim 16 in which the isochronal scheduler passes service events to the service event queue asynchronously with the dispatcher retrieving the service events from the service event queue.

18. The system of claim 16 in which the future event services include periodic services and the system further comprises a computer readable medium having stored thereon:

software for characterizing each periodic service as including an initial service event and one or more successive service events to be activated periodically, the initial service event having an initial event time;

software for applying the initial event time of the initial service event of each periodic service to a corresponding activation time in the isochronal table;

software for determining a skipping interval representing a number of activation times in the isochronal table corresponding to the period at which each of the one or more successive service events of a periodic service are to be activated periodically; and

software for storing at activation times determined by the skipping interval the one or more successive service events of each periodic service to be activated periodically.

19. The system of claim 18 further comprising software for providing selected non-periodic spontaneous services to plural client computation devices at respective ones of the activation times.

20. The system of claim 19 in which the selected non-periodic spontaneous services correspond to spontaneous events that are suitable for receiving delayed processing according to a predefined rule and are distinguished from spontaneous events that require immediate processing according to the predefined rule.

21. The system of claim 18 further comprising software for providing pre-scheduled non-periodic appointment services to plural client computation devices at respective ones of the activation times.